



## SPARK DISCHARGING DEVICE

### ABSTRACT OF THE DISCLOSURE

A spark discharging device that sparks on the closing of contacts carrying high current. In one embodiment, a capacitor is discharged to provide a short pulse of high current upon making contact between one movable electrode to the capacitor and a ground electrode. A solenoid coil energized from the engine's electrical system is operated in synchronism with the movement of the engine's piston. A solenoid drives a plunger and movable electrode tipped with a contact portion so the contact portion moves into engagement with a ground electrode connected to the return circuit. The movable electrode is coupled to the charged capacitor located within or external to the spark discharger housing. It is emphasized that this abstract is provided to comply with the rules requiring an abstract. It is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims (37 C.F.R. 1.72(b)).